

REVERSING COURSE:

The Troubled State of Academic Staffing and a Path Forward

**by JBL Associates, Inc.
for the American Federation of Teachers**

ABOUT THE REPORT

This report was prepared by JBL Associates, Inc. at the request of the higher education department of the American Federation of Teachers.

Since 1985, JBL Associates, Inc. (JBLA) has specialized in education research and policy analysis for postsecondary education. Based just outside Washington, DC, JBLA helps clients develop and evaluate postsecondary education policies and practices through the application of qualitative and quantitative analytic techniques. Clients include postsecondary institutions, state and national government agencies and private associations and organizations. JBLA utilizes data from an extensive library that includes all national databases relevant to postsecondary education; this library is often supplemented with local or state data to meet the unique needs of clients.

EXECUTIVE SUMMARY

Over the last generation, the instructional staffing system in American higher education has experienced a significant reduction in the proportion of jobs for full-time tenured and tenure-track faculty members and a dramatic growth in fixed-term full- and part-time instructional jobs without tenure. About 70 percent of the people teaching in college today hold these temporary jobs and are known as “contingent” faculty and instructors. Particularly in the case of part-time/adjunct faculty members, contingent instructors receive disproportionately low pay and inadequate employment benefits such as pensions and health insurance.

This report extends previous research on these trends. Specifically, it describes how public colleges and universities employ and compensate both full- and part-time faculty members to staff undergraduate courses. It provides a national overview of who is teaching which courses, and at what salary, in public colleges and universities. The results document the system-wide switch to contingent instruction and the disproportionately low salaries associated with part-time instructional employment.

KEY FINDINGS

Contingent faculty members and instructors are now teaching a majority of all undergraduate public college courses.

We have found that contingent faculty members teach 49 percent of the more than 1.5 million undergraduate classes taught each term at U.S. public colleges and universities. Because of limitations in the federal data set, this number does not include graduate employees at research universities who, according to our initial estimates, teach between 16 and 32 percent of undergraduate courses at research institutions. As a result, when graduate employees are included in the calculations, contingent faculty members and instructors now teach a majority of undergraduate classes in our public colleges and universities.

The share of classes taught by contingent faculty members differs by institutional type. Contingent faculty members teach nearly 58 percent of courses offered by public community colleges. Contingent faculty members teach approximately 40 percent of the classes at both comprehensive colleges and research universities (again, not counting graduate instructors).

Based on the percentage of classes taught, we can estimate that an average of 43 percent of undergraduates at public colleges in any given term are taught by contingent faculty. Contingent faculty members are the teachers of record for an average of 37 percent of undergraduates at public research and comprehensive universities each term. That percentage would certainly be higher, particularly at public research institutions, if graduate employees who were teaching as the instructors of record were included.

Contingent faculty members teach an average of 53 percent of students each term at public two-year colleges.

Contingent faculty members are teaching significant percentages of classes across multiple disciplines.

Contingent faculty members teach in all disciplines, but the percentage of courses taught by contingent faculty members varies by discipline. Contingent faculty members are most likely to teach courses in education, fine arts, human services and vocational education.

Contingent faculty members are earning disproportionately lower wages per class than are full-time tenured and tenure-track faculty members.

Contingent faculty members comprise an important component of the teaching force. They often bring unique experience and specialized knowledge to the classroom, allowing colleges and universities to provide a diverse undergraduate curriculum. However, contingent faculty members are not compensated proportionately for their contribution. **Part-time/adjunct faculty members, who comprise the majority of the contingent faculty pool, receive an average of \$2,758 per course**—only a quarter of what average full-time (tenured and tenure-track) faculty members receive on a per course basis if their full salaries are divided by the average number of classes they teach. Calculated the same way, full-time faculty members who are not on the tenure track earn, on average, a third less than their tenured/tenure-track colleagues.

However, when we move from a national pay comparison to a calculation of the salary differential at a particular institution, it may not be accurate to divide a full 100 percent of the salary of full-time tenured and tenure-track faculty by the number of courses they teach to get their pay per course. At most institutions, full-time tenured/tenure-track faculty members are paid to assume significant responsibilities outside the classroom, which may include research, committee work and community service. In those cases, the proportion of full-time tenured and tenure-track salaries devoted to teaching will be less than 100 percent and the salary differential will need to be adjusted somewhat. That said, ***it is not reasonable to suggest that contingent faculty members deserve to be paid at the disproportionately low wages they currently earn for the valuable service they provide.***

A MODEL FOR CHANGE

This report concludes with a strategy—a new interactive model to allow institutional and state policy makers to calculate the costs of increasing the ratio of full-time tenured and tenure-track faculty members in the classroom, and of moving toward pay equity for contingent faculty members. Institutions and states can use this model to develop an incremental financial plan to achieve a more stable and equitable staffing structure for their colleges and universities.

The Excel file required to use this model is available, along with this report, on the American Federation of Teachers Faculty and College Excellence (FACE) Web site at www.aftface.org.

INTRODUCTION

Recently, the Delta Cost Project, an initiative of the Lumina Foundation, released *The Growing Imbalance: Recent Trends in U.S. Postsecondary Education Finance*, which indicated that the instructional spending per full-time student at our colleges and universities has remained stagnant, while other non-instructional and non-educational spending has increased. This has resulted in an overall decrease in the proportion of institutional spending going to classroom instruction. According to the report, one factor contributing to this stagnant spending is that, in order to keep instructional costs low, colleges are employing a larger percentage of contingent faculty members and decreasing the number of full-time tenured and tenure-track faculty members they hire to cover classes.

Numerous reports have recorded this decline in the share of full-time tenured and tenure-track faculty members and the increased use of contingent faculty members by examining the numbers of faculty members in each category. Few studies, however, have looked at this issue by examining the numbers and types of courses taught by different groups of faculty, and none to our knowledge have estimated the cost of correcting the problem at the state and local levels.

This report evaluates the extent of the decline in the share of full-time tenured and tenure-track faculty at public institutions and the disproportionately low salaries paid to contingent faculty members and instructors.

As a means of moving the policy debate forward, this report includes an interactive model that states, individual colleges and faculty unions can employ to estimate how many people and how much financial support would be necessary to change staffing in a significant way. It offers a number of options based on the AFT Faculty and College Excellence Campaign (FACE), and explains how an individual institution could use the solutions. The model enables interested parties to estimate how much it would cost to increase the share of classes taught by full-time tenured/tenure-track faculty members, and to increase the salaries of part-time/adjunct faculty members.

We offer one caveat about data. Data available through the federal government are insufficient for telling the complete story of what is happening to academic staffing in this country. (Please see Appendices A and B for a longer discussion about data sources and availability and study methodology.) As a result, while we provide a model for calculating the cost of moving toward equitable goals, collecting the necessary data will require individuals or local unions to gather specific data from the institution and/or state.

A NOTE ON NOMENCLATURE

Throughout this document, we will use the term “contingent faculty” to refer to those faculty members who have limited-term appointments—appointments that are not permanent, but terminate at the end of a stated period of time (a quarter, a semester, a year, two years, etc.). The term contingent faculty includes part-time/adjunct faculty as well as full-time nontenure-track faculty (full-time faculty whose positions are not permanent or eligible for tenure).

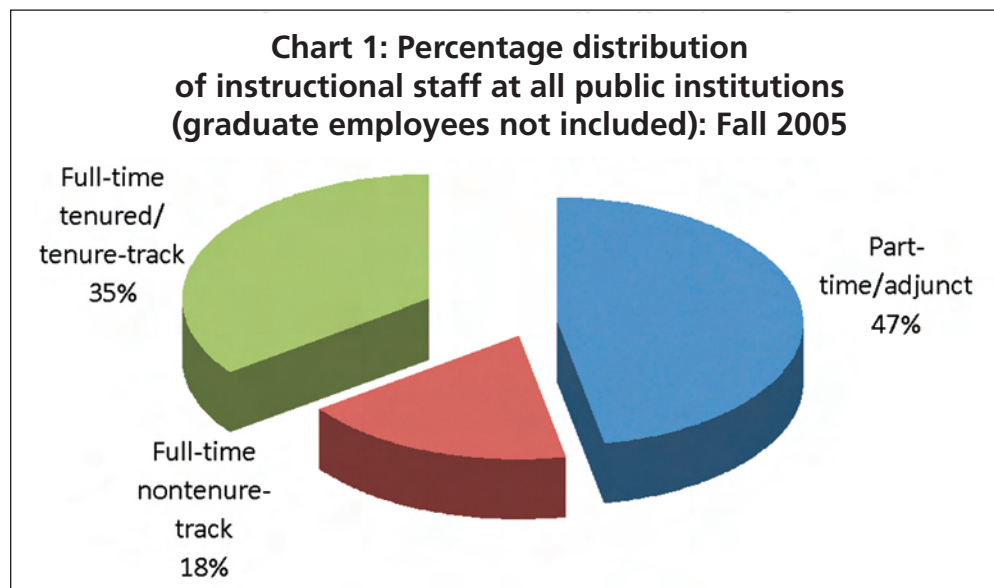
Another important segment of the instructional workforce are graduate employees who are teachers of record in many classes and have often not been included in research examining the shift to contingent instruction in higher education. This report makes a first attempt to include graduate employees in those calculations. Therefore, when we employ the phrases “contingent faculty and instructors” or “the contingent instructional workforce,” we are including graduate employees.

NATIONAL OVERVIEW

The decreasing investment in the higher education faculty raises serious issues about the ability of colleges and universities in the United States to provide the highest quality education possible. The percentage of full-time tenured and tenure-track faculty members has been declining. These faculty members are being replaced by a growing corps of instructors who teach classes part-time or on limited-term contracts, without permanent appointments, equitable compensation or appropriate professional support.

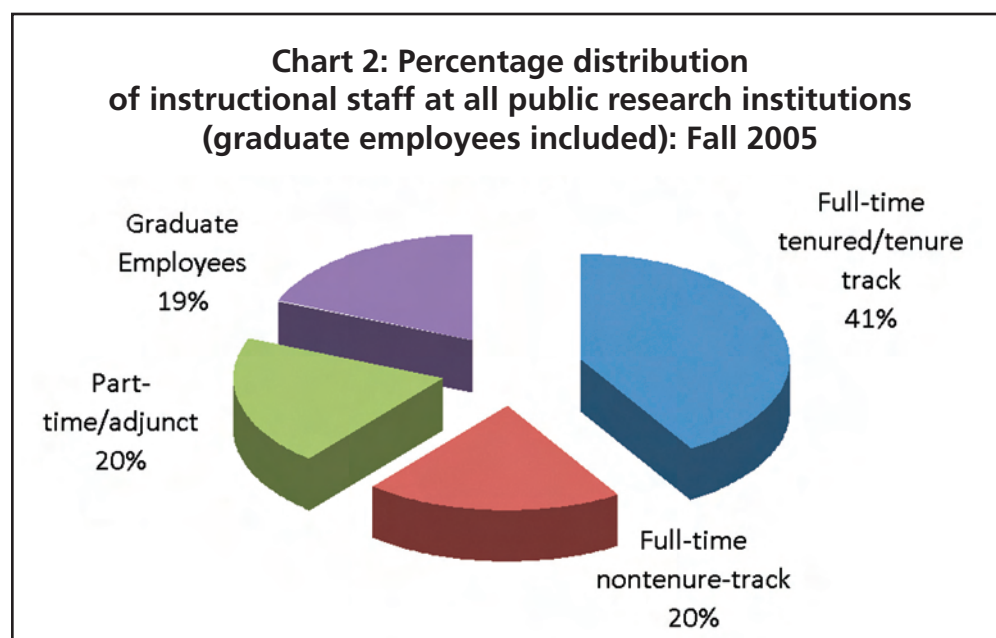
NUMBERS OF FACULTY MEMBERS AND INSTRUCTORS

According to the National Center for Education Statistics (NCES), of the 834,000 faculty members (not including graduate employees) who were employed at all public institutions in Fall 2005, 391,000, or 47 percent, were part-time and 146,000, or 18 percent, were full-time nontenure-track. The United States currently has a public teaching corps in which almost two-thirds of faculty members at public institutions are in part-time/adjunct or nontenure-track positions (Chart 1).



Source: US Department of Education, Integrated Postsecondary Education Data System (IPEDS) *Fall 2005 Survey*

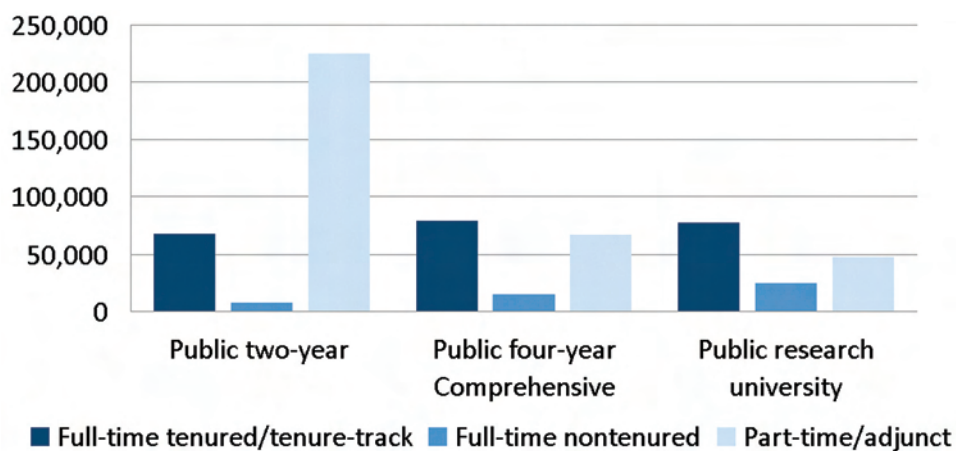
Contingent instruction, however, is not just limited to part-time and full-time nontenure-track faculty members. Graduate employees may teach courses as “instructors,” but they are not part of the formal “faculty.” This is particularly true at public research universities that rely most heavily on graduate employees as part of their instructional workforce. Therefore, if we add graduate instructors to the mix at public research institutions, the disparity between nontenure-track instructors and tenured and tenure-track faculty members becomes even more pronounced. Based on our estimates, 64,000 to 130,000 graduate employees teach as instructors of record, primarily in public research universities. This represents 19 to 32 percent of the college and university instructional workforce at public research institutions. Even the most conservative estimate—64,000 graduate employees in the instructional workforce—increases the share of nontenured or nontenure-track instructional staff at public research universities. In those institutions, only 41 percent of the faculty is represented by full-time tenured/tenure-track faculty; 40 percent are part-time/adjunct and full-time nontenure-track faculty members; and 19 percent are graduate employees (Chart 2).



Source: US Department of Education, Integrated Postsecondary Education Data System (IPEDS) *Fall 2005 Survey*; JBL Associates, Inc. analysis, 2008

Two-year community colleges do not have graduate employees, but they hire more part-time/adjunct faculty members than full-time tenured/tenure-track or full-time nontenured faculty members combined (Chart 3).

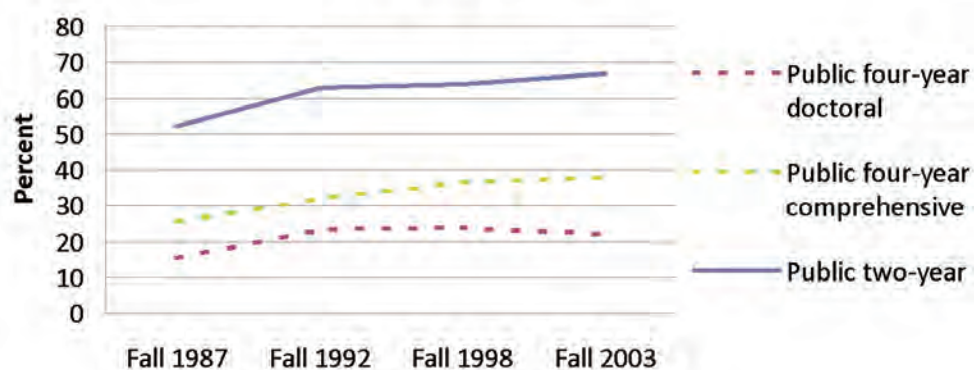
**Chart 3: Total number of faculty by institutional type:
Fall 2005**



Source: US Department of Education, Integrated Postsecondary Education Data System (IPEDS) *Fall 2005 Staff Survey*

Although public two-year institutions historically have employed the greatest proportion of part-time faculty (67 percent), all types of public institutions have increased their shares of part-time faculty since 1987 (Chart 4).

**Chart 4: Percent of part-time faculty by institutional type:
Fall 1987 to Fall 2003**

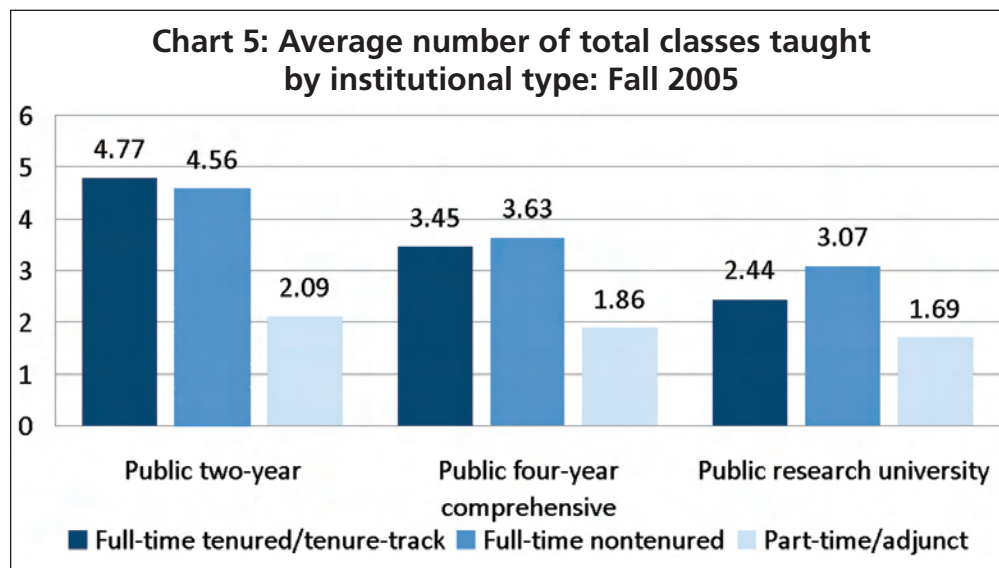


Source: National Center for Education Statistics (NCES), Data Analysis System (DAS), National Study of Postsecondary Faculty (NSOPF), various years

To get a better understanding of what these numbers mean in terms of actual impact in the classroom, we need to look more closely at faculty workloads.

TEACHING LOAD

Part-time/adjunct faculty members teach an average of 1.99 total classes per semester across all public institutions. Part-time faculty/adjunct faculty teach 2.09 classes at public two-year colleges, 1.86 classes at four-year comprehensive institutions, and 1.69 classes at research universities. Not surprisingly, the teaching load at public research universities is the lowest for every classification of faculty.



Source: U.S. Department of Education, National Center for Education Statistics, 2004, National Study of Postsecondary Faculty (NSOPF:04)

Part-time/adjunct faculty members in public two-year community colleges teach less than half of the average number of classes taught by full-time tenured and tenure-track faculty members. It is important to note that this is the teaching load for a single institution and does not take into account the fact that a part-time/adjunct faculty member may teach at multiple institutions and carry a heavier teaching load as a result.

Full-time nontenure-track faculty members at four-year comprehensive and research universities teach more classes, on average, than do full-time tenured and tenure-track faculty members. In addition, part-time/adjunct faculty members at both institutional types teach more than half the average number of classes taught by full-time tenured and tenure-track faculty members.

CLASSES TAUGHT: TOTAL AND BY DISCIPLINE

Contingent faculty members are making significant contributions to the undergraduate teaching workforce at each of the three institutional types discussed in this report—public two-year, public four-year comprehensive and public research universities. When we look at the staffing patterns by discipline, the involvement of contingent faculty becomes even more apparent¹.

Overall, contingent faculty members teach 49 percent of undergraduate classes at U.S. public colleges and universities. This number does not include graduate employees as they are not counted in the federal data set. Our estimates are that graduate employees teach between 16 and 32 percent of undergraduate courses. Adding graduate employees into the calculation means that well over half of all undergraduate courses are taught by contingent faculty and instructors although the percentages vary depending on institutional type.

Contingent faculty members teach nearly 60 percent of the classes at community colleges. The life sciences, engineering, and social sciences disciplines have the highest percentage of classes taught by full-time tenured/tenure-track faculty members, although even these disciplines have around half of the classes taught by contingent faculty members. Education has 77 percent of its classes taught by part-time or full-time nontenure-track faculty members.

Table 1: Total number of all classes taught¹ at public two-year institutions by faculty type, according to discipline: Fall 2003

Discipline	Full-time tenured/tenure-track classes	Full-time nontenured classes	Part-time/adjunct classes	Total classes	Percentage of classes taught by part-time faculty	Percentage of classes taught by contingent ² faculty
Business	26,130	1,275	25,326	52,731	48.0%	50.4%
Education	12,713	2,501	39,955	55,168	72.4%	77.0%
Engineering/computer sciences	44,392	4,011	39,605	88,008	45.0%	49.6%
Fine arts	22,365	2,377	27,038	51,779	52.2%	56.8%
Health science	26,756	4,799	28,475	60,030	47.4%	55.4%
Human services	20,081	2,663	48,049	70,793	67.9%	71.6%
Humanities	49,853	5,563	69,961	125,377	55.8%	60.2%
Life sciences	24,648	756	19,373	44,776	43.3%	45.0%
Natural/physical sciences	40,958	2,613	53,123	96,694	54.9%	57.6%
Social sciences	41,082	2,310	41,521	84,913	48.9%	51.6%
Vocational education	19,160	5,940	16,991	42,091	40.4%	54.5%
Total	328,137	34,806	409,418	772,361	53.0%	57.5%

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF:04)

¹ Total number of classes taught by each faculty type was calculated by multiplying total number of faculty by relevant average number of classes taught.

² Contingent faculty members refer to full-time nontenured faculty and part-time/adjunct faculty combined.

* Table does not include institutions that do not have a tenure system.

** Graduate employees are not included.

At comprehensive and research universities, roughly 40 percent of the undergraduate sections are taught by contingent faculty members. Again, a high percentage of education classes are taught by contingent faculty members; fine arts, human services and vocational education are also near the top. In general, the sciences and business departments have a relatively high percentage of classes taught by full-time tenured/tenure-track faculty members, although life sciences is the only discipline to have less than 30 percent of classes taught by contingent faculty members. These tables do not include graduate employees who may be teaching classes.

Table 2: Total number of all classes taught¹ at public four-year comprehensive institutions by faculty type according to discipline: Fall 2003

Discipline	Full-time tenured/ tenure-track classes	Full-time nontenured classes	Part-time/ adjunct classes	Total classes	Percentage of classes taught by part-time faculty	Percentage of classes taught by contingent ² faculty
Business	26,424	3,645	8,377	38,446	21.8%	31.3%
Education	28,637	4,773	16,397	49,808	32.9%	42.5%
Engineering/computer sciences	20,908	5,531	7,277	33,716	21.6%	38.0%
Fine arts	20,517	2,897	15,939	39,353	40.5%	47.9%
Health science	15,376	4,051	3,372	22,800	14.8%	32.6%
Human services	15,799	6,020	7,583	29,402	25.8%	46.3%
Humanities	42,612	7,963	21,621	72,197	29.9%	41.0%
Life sciences	14,352	1,681	3,540	19,572	18.1%	26.7%
Natural/physical sciences	38,378	6,804	15,349	60,530	25.4%	36.6%
Social sciences	49,381	6,567	19,718	75,667	26.1%	34.7%
Vocational education	2,630	682	1,901	5,212	36.5%	49.6%
Total	275,015	50,614	121,074	446,703	27.1%	38.4%

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF:04)

¹ Total number of classes taught by each faculty type was calculated by multiplying total number of faculty by relevant average number of classes taught.

² Contingent faculty member refers to full-time nontenured faculty and part-time/adjunct faculty combined.

* Table does not include institutions that do not have a tenure system.

** Graduate employees are not included.

Table 3: Total number of all classes taught¹ at public research universities by faculty type according to discipline: Fall 2003

Discipline	Full-time tenured/ tenure-track classes	Full-time nontenured classes	Part-time/ adjunct classes	Total classes	Percentage of classes taught by part-time faculty	Percentage of classes taught by contingent ² faculty
Business	13,844	4,800	4,182	22,826	18.30%	39.40%
Education	15,713	5,533	9,486	30,732	30.90%	48.90%
Engineering/computer sciences	25,937	4,424	6,466	36,828	17.60%	29.60%
Fine arts	20,295	4,229	10,218	34,742	29.40%	41.60%
Health science	15,292	9,907	9,638	34,836	27.70%	56.10%
Human services	11,113	4,917	8,150	24,180	33.70%	54.00%
Humanities	31,628	13,217	12,245	57,090	21.40%	44.60%
Life sciences	17,064	3,035	3,678	23,777	15.50%	28.20%
Natural/physical sciences	18,849	4,662	5,445	28,956	18.80%	34.90%
Social sciences	30,649	9,040	10,139	49,828	20.30%	38.50%
Vocational education	642	610	119	1,370	8.70%	53.20%
Total	201,026	64,373	79,766	345,165	23.1%	41.8%

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF:04).

¹ Total number of classes taught for each faculty type was calculated by multiplying total number of faculty by relevant average number of classes taught.

² Contingent faculty member refers to full-time non-tenured faculty and part-time/adjunct faculty combined.

* Table does not include institutions that do not have a tenure system.

** Graduate employees are not included.

Based on these estimates for average number of classes, we can approximate that 43 percent of undergraduate students are taught by contingent faculty members at public colleges. In Fall 2003, 53 percent of students at public two-year colleges were taught by contingent faculty. At public four-year comprehensives, 38 percent of *classes* and 37 percent of *students* were taught by contingent faculty. For public research universities, the percentages were 42 and 37 for classes and students, respectively. Again, this percentage would be higher if graduate employees teaching as instructors of record were included.

COMPENSATION

The compensation paid to part-time/adjunct faculty members is disproportionately low when compared to full-time faculty members. Across all institutional types, the average full-time faculty member is paid four times as much to teach a class than is the average part-time faculty member if the full salaries of full-time tenured and tenure-track faculty are divided by the number of classes they teach.

Across all institutional types, the average part-time/adjunct faculty member earned an annual base salary of \$9,745 in 2003-04, or \$2,758 per course. In comparison, full-time faculty members earned an average annual salary of \$58,306, or \$11,051 per course.

However, we must remember that in most institutions, full-time tenured and tenure-track faculty members have significant responsibilities outside of the classroom.

As a result, it may not be accurate to count classroom teaching as constituting 100 percent of the salaries of full-time tenured and tenure-track faculty members. These responsibilities may include research, committee work and community service. Full-time tenured and tenure-track faculty members also receive support to perform other functions—i.e., working with student groups, being available to help with special student projects and being available to students outside of class.² That said, it is not reasonable to suggest that contingent faculty members, particularly part-time/adjunct faculty members, deserve to be paid at the disproportionately low wages they currently earn for the valuable service they provide.

Even though the salary differential varies across the three institutional types (two-year community colleges, four-year comprehensive colleges and research universities), the difference is in the same direction and relative magnitude. Part-time faculty members are paid significantly less than are full-time faculty members. Part-time faculty members at two-year community colleges, four-year comprehensive colleges and public research universities earn between \$5,200 and \$16,000 less per course than do full-time tenured/tenure-track faculty members (Table 4).

Table 4: Average salary for full-time tenured, full-time nontenure-track and part-time/adjunct faculty by institutional type: Fall 2003-04

Faculty Status	Average Salary		
	Basic annual salary	Other salary from institution*	Salary per course
Public two-year			
Full-time tenured/tenure-track	\$58,645.34	\$5,814.15	\$7,722.22
Full-time nontenure-track	40,117.43	2,625.41	6,097.89
Part-time	8,855.09	727.34	2,486.38
Public four-year comprehensive			
Full-time tenured/tenure-track	64,434.57	4,584.98	10,731.37
Full-time nontenure-track	41,033.41	3,009.53	7,298.65
Part-time	9,549.53	859.77	2,645.24
Public research university			
Full-time tenured/tenure-track	78,408.86	6,764.50	20,252.75
Full-time nontenure-track	46,974.68	3,474.77	9,775.97
Part-time	14,228.32	1,158.80	4,245.25

Source: U.S. Department of Education, National Center for Education Statistics, 2004 National Study of Postsecondary Faculty (NSOPF:04)

*Other salary from institution may include summer session, overload courses, administration, research, coaching sports, etc.

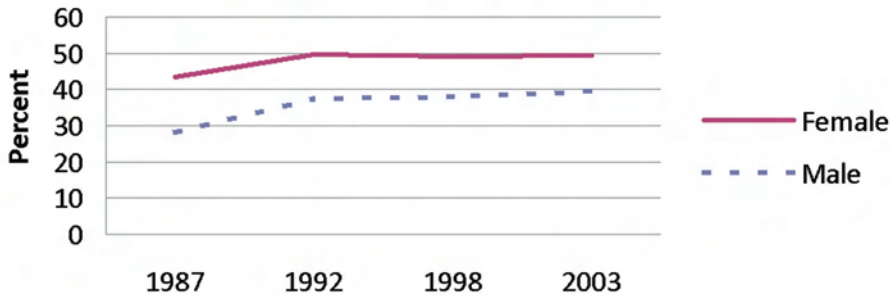
There is also a demonstrable salary gap between full-time nontenure-track faculty members and full-time tenured faculty members. Full-time nontenure-track faculty members receive \$6,000 to \$9,800 per course, depending on the institutional type. They earn an average of one-third less than full-time tenured faculty members and have fewer options for additional income from the institution. In addition, since nontenure-track faculty members are not on continuous contracts and can be terminated without due process, they have less opportunity for professional advancement and pay increases during their time at the college, creating the potential for a larger pay gap over time.

DEMOGRAPHIC FEATURES

As we consider making changes to academic staffing at our colleges and universities, it is important to know who the contingent faculty members facing these conditions are. Who benefits from any additional pay or support? Contingent faculty members are diverse and often reflect characteristics different from those of full-time faculty members in the areas of gender, race/ethnicity, and age. Currently, the trend is for women and faculty members under 35 and over 64 to be in contingent faculty positions. Minorities, though still not as likely as whites to be in full-time tenured and tenure-track positions, have seen considerable increases in both full-time and part-time positions.

Gender. Women remain more likely to be contingent faculty members than men. As shown in Chart 6, in Fall 1987, 28 percent of male faculty members were employed part-time, compared to 40 percent in Fall 2003, an increase of almost 41 percent. The proportion of women teaching part-time increased 14 percent between Fall 1987 and Fall 1992, and has since remained relatively steady at 49 percent.

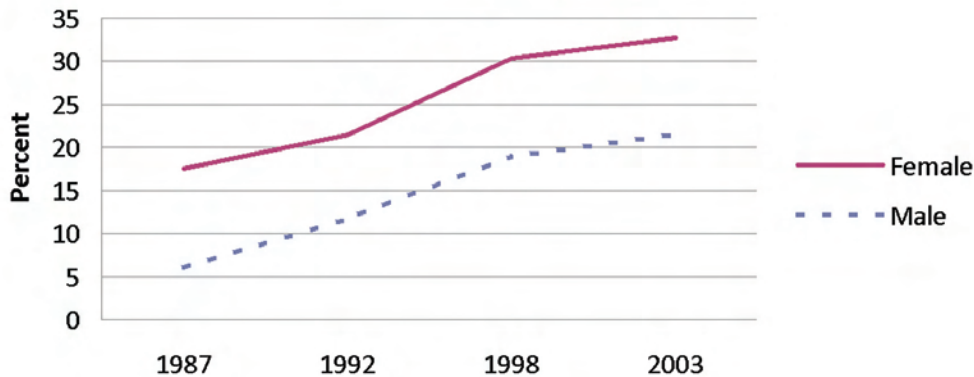
Chart 6: Percentage of the faculty at all degree-granting institutions that are part-time by gender: Fall 1987 to Fall 2003



Source: National Center for Education Statistics (NCES), Data Analysis System (DAS), National Study of Postsecondary Faculty (NSOPF), various years

Women are also more likely than men to be in full-time nontenure-track positions. However, the rate at which women are filling the full-time nontenure-track faculty positions is greater than the rate at which they are filling part-time/adjunct positions (Chart 7).

Chart 7: Percentage of the faculty at all degree-granting institutions that are full-time nontenure-track by gender: Fall 1987 to Fall 2003



Source: National Center for Education Statistics (NCES), Data Analysis System (DAS), National Study of Postsecondary Faculty (NSOPF), various years

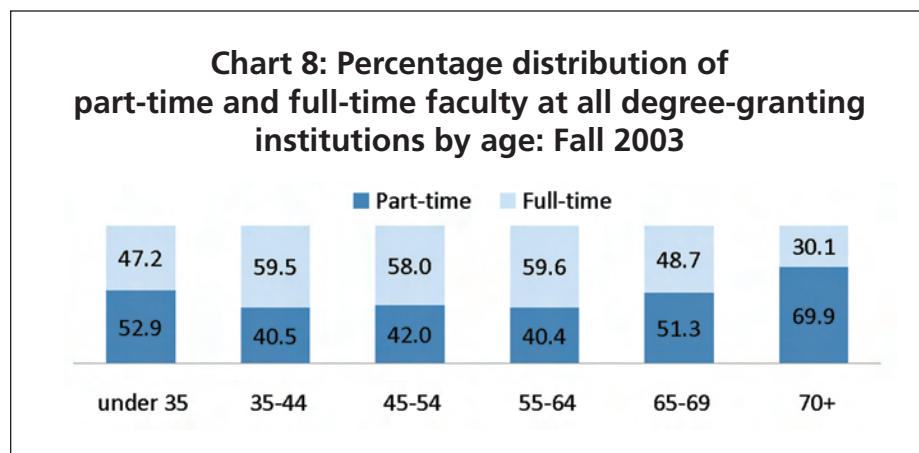
Race/Ethnicity. All racial and ethnic groups saw increases in their overall numbers of both full-time and part-time faculty from Fall 1992 to Fall 2003; however, both full-time and part-time faculty members are still more likely to be white than any other race or ethnic group. The proportion of black faculty members teaching full-time versus part-time was not significantly different in 2003. Asian and Pacific Islander faculty members, however, were more likely to be full-time than they were part-time (9 percent vs. 4 percent).

Table 5: Number (in thousands) of full-time and part-time faculty in all degree-granting institutions by race/ethnicity: Fall 1992, Fall 1998 and Fall 2003

	Fall 1992		Fall 1998		Fall 2003		Change from 1992 to 2003
FULL-TIME							
White	456.7	(86%)	477.0	(85%)	547.7	(80%)	20%
Black	27.4	(5%)	28.4	(5%)	38.1	(6%)	39%
Hispanic	13.9	(3%)	18.5	(3%)	23.8	(3%)	71%
Asian/Pacific Islander	27.7	(5%)	32.5	(6%)	62.3	(9%)	125%
American Indian/Alaska Native	2.6	(1%)	4.0	(1%)	10.0	(1%)	285%
Total	528.3	(100%)	560.4	(100%)	681.8	(100%)	29%
PART-TIME							
White	332.8	(88%)	364.4	(88%)	451.6	(85%)	36%
Black	18.3	(5%)	18.9	(5%)	29.7	(6%)	62%
Hispanic	11.2	(3%)	15.5	(4%)	18.7	(4%)	67%
Asian/Pacific Islander	12.2	(3%)	13.2	(3%)	20.3	(4%)	66%
American Indian/Alaska Native	2.3	(1%)	4.0	(1%)	9.7	(2%)	322%
Total	376.7	(100%)	416.0	(100%)	530.0	(100%)	40%

Source: National Center for Education Statistics (NCES), National Study of Postsecondary Faculty (NSOPF), various years

Age. Part-time/adjunct faculty members were more concentrated at the ends of the age range than were full-time faculty members. Although the average age of both full-time and part-time faculty members was not significantly different, a greater proportion of part-timers were under 35 or over 64 than were full-timers. It appears that part-time teaching may provide either an entrance into or an exit from the teaching profession, or that it might be a preliminary career or semi-retirement option for those from other professions. Another possibility could be that part-time faculty members are leaving the profession mid-career if they do not move to full-time positions. Chart 8 shows the distribution of part- and full-time faculty members by age in Fall 2003. More than 50 percent of faculty members under the age of 35 or over the age of 65 were employed part-time in Fall 2003.



Source: National Center for Education Statistics (NCES), Data Analysis System (DAS), National Study of Postsecondary Faculty (NSOPF), various years

GRADUATE EMPLOYEES

As mentioned in the previous section, graduate teaching and research assistants are not counted as college “faculty” in most databases, but graduate teaching assistants are an important part of the instructional force in research universities. It is hard to isolate the role of particular graduate employees in the classroom because graduate employees may be the “teachers of record” in some courses, but perhaps not in others, where they may assist faculty members by leading discussion sessions, grading papers or helping with other administrative tasks. No national data exist that isolate those graduate employees who teach undergraduates from those with other responsibilities.

The overall number of research and teaching assistants at public institutions doubled between Fall 1976 and Fall 2005, increasing from 127,925 to 257,952. Teaching and research assistants receive payment from the departments for which they work. In 2003-2004, 49.1 percent of doctoral students attending a public institution received an assistantship. The average amount of an assistantship for a doctoral degree student in 2003-04 was \$12,600 at public institutions; however, most did not receive health or professional benefits³.

Table 6 shows the demographics among teaching and research assistants. Women represent 47 percent of teaching and research assistants at public institutions, and although white students represent the largest racial/ethnic group, the combination of minorities and those of unknown race/ethnicity represents 47 percent of teaching and research assistants.

Table 6: Total number of graduate employees in public degree-granting institutions by sex, race/ethnicity and type of institution: Fall 2005

Type of Institution	Total	Gender		Race/ethnicity					
	Number	Males	Females	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Unknown
All public institutions	257,952	53%	47%	53%	4%	4%	8%	*	31%
public four-year	257,578	53%	47%	53%	4%	4%	8%	*	31%
public two-year	374	54%	46%	68%	19%	3%	6%	*	4%

Source: U.S. Department of Education, National Center for Education Statistics, 2005, Integrated Postsecondary Education Data System (IPEDS), Winter 2005-06.

* Less than 1 percent

In the course of our research, we looked at three public research universities to determine whether graduate employees represent a significant share of the instructional staff. In Fall 2006, teaching assistants at the University of Illinois taught approximately 2,640 sections. At Rutgers, the State University of New Jersey, graduate employees taught 1,847 sections⁴. Both state institutions have average enrollments between 62,000 and 64,000 students. At the University of Oregon, which enrolls 20,000 students, teaching and research assistants taught approximately 2,648 sections⁵. In all cases, only those listed as being the teacher of record were counted. Graduate employees serving as teacher’s aides or sharing the teaching responsibilities with a full-time faculty member were not included.

In each of these universities, we estimated the number of sections for which graduate teaching assistants were the instructors of record. For example, according to the IPEDS 2005 Fall Staff Survey (NCES), 7,179 instructional and research assistants worked at the University of Illinois. The university reports that 1,308 teaching assistants, or 18.2 percent of all RA/TAs, were the instructors of record in over 2,640 sections. This results in an average teaching load of two sections for each teaching assistant in the fall semester. The same formula shows that the graduate assistants at Rutgers, where 57.5 percent (1,700 out of 2,957) of the TAs and RAs taught sections, averaged 1.1 sections per semester. The University of Oregon reports that during the 2006-07 academic year, 770, or 36 percent, of its teaching and research assistants taught 2,648 sections. A teaching and research assistant at the University of Oregon, therefore, has an average workload of 1.7 sections per semester.

Projecting these statistics suggest that graduate employees at public research universities teach between 128,976 and 257,952 sections nationally. This represents between 16 and 32 percent of all undergraduate sections offered by public universities. These estimates only suggest the magnitude of the issue and do not represent anything other than a first guess. The data regarding graduate teaching and research assistants are incomplete, and more research should be done to look specifically at pay, workloads and other assignments graduate teaching and research assistants undertake at their institutions. As their numbers continue to grow, higher education needs better information about this segment of the teaching staff.

A NEW MODEL FOR CALCULATING THE COSTS AND CONSEQUENCES OF ALTERNATIVE STAFFING PATTERNS

We have just documented the decline of full-time tenured and tenure-track faculty and the disproportionately low compensation accorded contingent faculty members and instructors, especially part-time/adjunct faculty members. We have also outlined the growth of classes taught by graduate employees. These trends have the potential to create an inequitable, unstable instructional workforce, and to impair academic freedom and educational quality. At the same time, attempts to reverse these trends often have been resisted on grounds of being too costly and difficult to implement.

Debates about this issue have suffered due to a lack of concrete information about the human and financial consequences of alternative staffing patterns and about how to change the situation in achievable steps. In the following section, we present a formula that faculty members, administrators and government policymakers can use to calculate the impact of alternative staffing and pay options on specific institutions or across state systems.

This formula is consistent with the Faculty and College Excellence Campaign (FACE) of the American Federation of Teachers because the AFT campaign presents a specific plan to achieve pay equity **and** increase the number of full-time tenured faculty members without job loss to existing instructors. The basic goals of FACE, which may be adjusted to account for local conditions, are as follows:

- Increase to 75 percent the ratio of undergraduate courses taught by full-time tenured and tenure-track faculty members compared to contingent faculty members and instructors in academic departments that have an equivalent of eight or more full-time faculty positions;
- Provide pro-rata pay and equitable healthcare benefits and pensions for contingent faculty members and instructors;
- Require that institutions develop a plan to reach this goal, not by taking away the jobs of current contingent employees, but by normal faculty turnover and the creation of new positions;
- Offer preferential consideration to qualified part-time/adjunct and other nontenure-track faculty members in filling new full-time tenured and tenure-track jobs; and
- Create a funding source dedicated to achieving these aims.

Now assume you are a faculty member, a higher education union leader, a college administrator or public official trying to consider alternatives to today's staffing and pay practices. To help you do that, we offer the following Interactive Model using Microsoft Excel by which you may estimate the costs of various strategies. The Excel model will help you determine the institutional outlays necessary for moving to a higher percentage of classes taught by full-time tenured and tenure-track faculty members, and/or establishing pay equity for contingent faculty members and instructors.

The model will enable you to:

1. **Assemble key data from a particular institution, as well as national data sources on the structure and compensation of the instructional staff.** This part will take some work and might mean going to multiple sources and/or reconciling conflicting data. But at the end of the gathering process, you should have a common core of data and a transparent data set from which to access information.
2. **Begin an informed policy conversation on campus.** Deciding to use this model and asking for the relevant data starts discussions among faculty members, students and administrators about the institution's goals for academic staffing and where the institution currently is in the process. With this information, stakeholders in the institution can evaluate its priorities and estimate what financial obligation is incurred to make various changes.
3. **Establish a blueprint for change.** Finally, the model will suggest how incremental changes can be made to advance long-term goals.

The Interactive Model In Action

The easiest way to understand the model will be to see it in action. Below we offer a hypothetical scenario to demonstrate how the model works. For this scenario we are using a hypothetical four-year institution that employs the full range of instructional staff: full-time tenured and tenure track faculty members, full-time nontenure-track faculty members, part-time/adjunct faculty members and graduate employees. As we go through the scenario we will note where adjustments might be made if your institution does not employ all of these employee groups or if you have different goals for your institution. At the end of that scenario, we will discuss using the model to make projections about statewide staffing levels.

SCENARIO: Sample State University¹

The following describes how a Sample State University could use the Interactive Model to estimate the consequences—cost consequences and consequences to individuals—of making changes in the apportionment of faculty and equalizing pay for contingent faculty members. We will start with three premises.

1. For the purposes of this example, we will assume that 55 percent of the undergraduate classes taught at Sample State University are now taught by tenured and tenure-track faculty members, while 45 percent are taught by contingent faculty members and instructors including graduate employees.
2. Following the FACE model, we will assume that the institutional goal at Sample State University is to change this ratio gradually to the point where 75 percent of classes are taught by tenured and tenure-track faculty members and 25 percent are taught by contingent faculty members.
3. Third, we will assume for the purpose of this example that pay “equity” for contingent faculty members is computed to be 100 percent of the per course pay of tenured and tenure-track faculty members and that Sample State University wants to move the institution to full pay equity for contingent faculty members over a period of time.

With these premises in place, we now come to the one hard part—gathering the information needed to use the model for planning and advocacy.

¹ Sample State University is a fictitious institution and is used only for example purposes.

DOWNLOAD THE MODEL

To download the actual Excel file with the model formulas already in place, visit the AFT's Faculty and College Excellence site at www.aftface.org.

Step One: Compiling the basic facts at your institution

The model is divided into steps. The first step is the only one that requires information from you. To use the model, you will need to gather information about faculty and instructional staff at your institution.

Specifically, we will be using data related to:

- average faculty pay
- number of classes taught
- number of faculty members

Here is a list of potential information you will need:

- Average full-time tenured and tenure-track faculty member's basic salary (you can enter a first-year assistant professor's salary, or any other salary in which you may be interested, and view the comparisons);
- Average full-time nontenure-track faculty member's basic salary;
- Average pay per class for part-time/adjunct faculty members;
- Average number of classes/courses for full-time tenured and tenure-track faculty members, annually;
- Average number of classes/courses for full-time nontenure-track faculty members, annually;
- Average number of classes/courses for part-time/adjunct faculty members, annually;
- Number of full-time tenured and tenure-track faculty members at your institution;
- Number of full-time nontenure-track faculty members at your institution;
- Number of part-time/adjunct faculty members at your institution;
- Number of and pay for graduate employees, if applicable; and
- Percentage that defines pay equity at your institution.

In some cases, you will not need all of this information depending on the make-up of the instructional staff at your institution. We will need all of this information in our scenario since we are working with an institution that employs all categories of instructional staff.

Filling in this information for Sample State University, we find:

- 575 full-time tenured and tenure-track faculty members, averaging \$62,580 in basic salary and teaching six classes annually.
- 170 full-time nontenure-track faculty members, averaging \$43,750 in basic salary and teaching five classes annually.
- 375 part-time/adjunct faculty members, averaging \$2,700 per course and teaching four classes annually.
- 500 graduate employees, averaging \$2,000 per course and teaching two classes annually.

A NOTE ABOUT DATA

The best source for this information will be your institution, though the federal government has several databases where you can find some of the information you need, such as the number of faculty or the average salary of a full-time faculty member. The American Federation of Teachers also provides much of this federal data on its Web site. *(Please see Appendix A for information about these sources and what information is available through the sources.)*

We understand that institutions can be reluctant to share information. Consequently, and as we indicated above, the process of gathering the data, including an institution's or state's resistance to be transparent about this information, can be helpful in itself in initiating serious discussions about staffing patterns at your college or university.

Step Two: Incorporating raw data into the model

The purpose of the Interactive Model is to display the current status of key academic staffing elements at your institution and then to manipulate this information so you can imagine with your colleagues what a better system would look like, what it would cost and how long you would need to get there.

After collecting the needed information listed above, we now will have to insert the information you collected into the model. Below is a complete list of data that could be entered. Again, however, you may not be using all of the categories at your own institution. For instance, if you are working on staffing issues at a community college, you most likely would not have graduate employees to consider. In such cases, you would leave these cells in the model blank.

Here is a list of information that needs to be inserted into the model. In the appropriate cell, enter the:

1. average full-time faculty salary (this category is for institutions without tenure. If your institution has tenure, you should use the categories below and leave this cell blank).
2. average full-time salary for tenured and tenure-track faculty.
3. average salary for full-time nontenured faculty.
4. average pay a part-time/adjunct faculty member receives per class.
5. average pay a graduate employee receives per class, if applicable.
6. number of full-time faculty members at your institution (this cell is for use by institutions without tenure).
7. number of full-time tenured and tenure-track faculty members at your institution.
8. number of full-time nontenured faculty members at your institution.
9. number of part-time/adjunct faculty members at your institution.
10. number of graduate employees at your institution.
11. average number of classes or courses a full-time faculty member teaches at your institution throughout the academic year (this cell is for use by institutions without tenure).
12. average number of classes or courses a full-time tenured and tenure-track faculty member teaches at your institution throughout the academic year.
13. average number of classes or courses a full-time nontenured faculty member teaches at your institution throughout the academic year.
14. average number of classes or courses a part-time/adjunct faculty member teaches at your institution throughout the academic year.
15. average number of classes or courses a graduate employee teaches at your institution throughout the academic year.

Using the data we have and filling in those cells, here is what the first data set of the Interactive Model for Sample State University would look like:

Institution Model for calculating ratio of classes taught and pay equity for faculty

NOTE: For rows not in use, leave blank.

NOTE: Either leave Row 1 blank or leave Rows 2 & 3 blank.

NOTE: Leave row blank if you have no GEs.

	Pay	Number of faculty at your institution	Average number of classes ANNUALLY
Average full-time salary: (when institution does not have tenure)			
Average full-time salary: Tenured/tenure-track	\$62,580	575	6
Average full-time salary: Nontenured	\$43,750	170	5
Part-time/adjunct faculty (pay per course)	\$2,700	375	4
Graduate employees (pay per course)	\$2,000	500	2

Now, as you begin planning your goals, you will need to make four determinations.

1. You need to determine how you want the work distributed among the contingent instructional workforce at your institution. If the goal is to reach a point where 25 percent of classes are taught by contingent faculty members and instructors, as is the case in our example, the next question is what percentage of those classes should be taught by full-time nontenure-track faculty members, by part-time/adjunct faculty members and by graduate employees. The model asks you to put in a percentage for each group. That amount should total 100 percent representing all instruction done by contingent faculty members and instructors. This will allow the model to distribute the work as you move incrementally toward the goal. In our scenario, we are simply going to divide that work equally among all three of the groups. Your determination will most likely have more variance as you determine typical workloads, departmental needs and goals for your institution.
2. You need to establish the incremental annual change in the percentage of classes taught by contingent faculty members and instructors that you are trying to achieve. To do this, the model requires you to insert a percentage point by which you would like the ratio to change for each group. For instance, in our example, we are determining that we want the overall ratio to change by 3 percent each year over five years, which will translate in a reduction of the percentage of classes taught by each category of contingent instructional staff of 1 percentage point each year. This would mean that after five years, 70 percent of classes would be taught by full-time tenured and tenure-track faculty members and that it would take approximately seven years to reach the ultimate ratio of 75/25. You could do this differently based on your circumstances. Rather than doing an across-the-board adjustment, you could seek to reduce classes taught by a certain group more quickly than another (as an example, you might decide to eliminate the lowest-paid positions most quickly).

3. You need to set a percentage for pay equity. In our example, we are using 100 percent of the average full-time tenured and tenure-track faculty salary. As we have noted earlier, you may determine that pay equity should be established at a lower level based on the differing responsibilities of full-time tenured and tenure-track faculty members. You could also determine that pay equity is different for different groups of contingent faculty members and instructors based on qualifications and/or responsibilities.
4. You need to determine the annual incremental change in pay equity that you are seeking to achieve. That could be a certain percentage across the board, or you could seek to improve one group of contingent faculty members or instructor salaries more quickly than others (e.g., bring up the lowest-paid more quickly). In our example, we are seeking to move toward pay equity in 10 percent increments across the board.

Those determinations are easily added to the model.

Model variables for calculating rate of change

PERCENTAGES YOU WOULD LIKE THE MODEL TO USE IN ITS CALCULATIONS	Full-time nontenured faculty	Part-time/adjunct faculty	Graduate employees
Percentage distribution of classes taught by three types of contingent instructional staff	33.33%	33.33%	33.34%
Annual incremental decrease in share of classes taught by contingent instructional staff (in percentage points)	1%	1%	1%
Target for contingent instructional staff salary as a percent of full-time tenured faculty salary	100%	100%	100%
Annual incremental change for moving toward desired pay equity level	10%	10%	10%

Step Three: Manipulating the data based on your goals

The third step of the Interactive Model is to calculate the **cost** of making changes in the staffing structure and compensation.

First, the model calculates how many full-time tenured and tenure-track faculty members and how many contingent faculty members and instructors would be needed to maintain the same class load at your institution under varying staffing ratios. It begins with the current state of staffing at your institution and then offers five different increments, based on the percentage of classes taught by contingent faculty members and instructors. The first four increments are increases based on the percentage of change you placed in the model earlier. The final increment is set at the goal of 75 percent of classes taught by full-time tenured/tenure-track faculty members. At Sample State University, our goal is to get to 75 percent of classes taught by full-time tenured and tenure-track faculty members. The table will also show the difference in total outlays based on hiring more or fewer contingent faculty members and instructors.

Based on the information entered earlier and the model's calculations, it will cost Sample State University \$50,684,000 over one year to decrease the share of classes taught

by contingent instructional staff. It would cost the institution \$60,814,245 to move all the way to 75 percent of classes taught by tenured and tenure-track faculty members. In both cases, the total number of classes taught at the institution remains constant.

Calculations for classes taught

	Current academic staffing at your institution	Change for year one, based on annual increment	Change for year two, based on annual increment	Change for year three, based on annual increment	Change for year four, based on annual increment	If 75% of classes taught are by full-time tenured/tenure-track faculty
Percentage of classes taught						
Full-time	-	-	-	-	-	-
Full-time tenured	50.7	53.7	56.7	59.7	62.7	75.0
Full-time nontenured	12.5	11.5	10.5	9.5	8.5	8.3
Part-time/adjunct	22.1	21.1	20.1	19.1	18.1	8.3
Graduate employees	14.7	13.7	12.7	11.7	10.7	8.3
Total	100	100	100	100	100	100
Number of classes taught						
Full-time	-	-	-	-	-	-
Full-time tenured	3,450	3,654	3,858	4,062	4,266	5,100
Full-time nontenured	850	782	714	646	578	567
Part-time/adjunct	1,500	1,432	1,364	1,296	1,228	567
Graduate employees	1,000	932	864	796	728	567
Total	6,800	6,800	6,800	6,800	6,800	6,800
Number of faculty						
Full-time	-	-	-	-	-	-
Full-time tenured	575	609	643	677	711	850
Full-time nontenured	170	156	143	129	116	113
Part-time/adjunct	375	358	341	324	307	142
Graduate employees	500	466	432	398	364	283
Total	1,620	1,589	1,559	1,528	1,498	1,388
Total annual outlays						
Full-time	-	-	-	-	-	-
Full-time tenured	\$35,983,500	\$38,111,220	\$40,238,940	\$42,366,660	\$44,494,380	\$53,193,000
Full-time nontenured	7,437,500	6,842,500	6,247,500	5,652,500	5,057,500	4,957,838
Part-time/adjunct	4,050,000	3,866,400	3,682,800	3,499,200	3,315,600	1,529,847
Graduate employees	2,000,000	1,864,000	1,728,000	1,592,000	1,456,000	1,133,560
Total	49,471,000	50,684,120	51,897,240	53,110,360	54,323,480	60,814,245

Next, the model calculates the current state of pay equity at your institution based on the data you have provided and shows the increments of annual change you selected based on the highest percentage of equity you have established. The final column will show the highest level of pay equity—in this sample case, 100 percent.

Here is a closer look at the calculations each table in the model completes based on the data we entered for Sample State University.

Calculations for pay equity

	Current salaries	Change for year one, based on annual increment	Change for year two, based on annual increment	Change for year three, based on annual increment	Change for year four based on annual increment	Target pay equity for contingent instructional staff
Average basic salary and pay per course						
Full-time	-	-	-	-	-	-
Full-time tenured	\$62,580	\$62,580	\$62,580	\$62,580	\$62,580	\$62,580
Full-time nontenured	43,750	48,125	52,938	58,231	64,054	62,580
Part-time/adjunct	2,700	2,970	3,267	3,594	3,953	10,430
Graduate employees	2,000	2,200	2,420	2,662	2,928	10,430
Total annual outlays						
Full-time	-	-	-	-	-	-
Full-time tenured	\$35,983,500	\$38,111,220	\$40,238,940	\$42,366,660	\$44,494,380	\$53,193,000
Full-time nontenured	7,437,500	7,526,750	7,559,475	7,523,478	7,404,686	7,091,691
Part-time/adjunct	4,050,000	1,063,260	1,114,047	1,164,359	1,213,592	1,477,436
Graduate employees	2,000,000	1,025,200	1,045,440	1,059,476	1,065,865	2,955,758
Total	49,471,000	47,726,430	49,957,902	52,113,972	54,178,523	64,717,884

At 100 percent parity with the full-time tenured and tenure-track faculty members at Sample State University, full-time nontenure-track faculty members receive \$62,580 in basic salary, and part-time/adjunct faculty members and graduate employees receive \$10,430 per course. Total annual cost to the institution in order to reach 100 percent parity would be \$64,717,884. If you had selected different levels of pay equity for each group of contingent instructional staff, the model would calculate those different rates of pay.

Step Four: Putting it all together

Now that we have these important pieces of the equation, the next step is to calculate the cost to accomplish both the goal of increasing the ratio of classes taught by full-time tenured and tenure-track faculty members and the goal of achieving a certain level of pay equity.

Total costs

	Number of classes at 75/25 ratio	Salary at pay equity	Cost
Full-time	-	-	-
Full-time tenured	5,100	\$ 62,580	\$53,193,000
Full-time nontenured	567	62,580	7,091,691
Part-time/adjunct	567	10,430	1,477,436
Graduate employees	567	10,430	2,955,758
Total cost			\$64,717,884

In sum, then, it will cost Sample State University \$64,717,884 annually to achieve 100 percent pay equity, with 75 percent of classes taught by full-time tenured or tenure-track faculty members.

LOOKING BEYOND YOUR INSTITUTION: Calculations at the state level

Now that we have the calculations for Sample State University, we can use the model to estimate costs across the state. To reach a statewide cost total, we have two options for using the Interactive Model:

1. The Interactive Model may be used for each public institution in the state, calculating an institutional cost for moving toward a predetermined percentage of classes taught by full-time tenured faculty members and pay equity. Individual institutional costs would then be combined to determine a total cost to the state. This method would provide the most accurate estimate of costs to the state.
2. Statewide averages may also be used for faculty pay and classes taught annually to calculate statewide results. These numbers may be added to the first table in the interactive model, following the same instructions as if working with a single institution. Statewide averages and totals would be feasible if you are looking at a small number of institutions or if you are estimating costs for a specific sector, such as community colleges. The model's calculations for total costs would then represent the total costs to the state.

CONCLUSION

Determining how to change the current staffing structure in your institution, in your state and in higher education generally is a complicated process at best. Until a serious effort is made to systematically determine the facts, however, the arguments about what should be done will continue to be stalled by ignorance of the cost. We have attempted to provide a mechanism to help forward the discussion on the grounds of cost and investment.

The most important value of the Interactive Model is that it allows you to set a particular goal, see how the numbers run, look at the consequences of the option you choose, and see how that option fits in with other goals. You can, for example, change the percentage goals you want to achieve, or change the number of years you need to achieve them or move one factor more quickly and another more slowly. It allows you to try one option, and then, if you wish, try a different option or ten different options until you achieve a result you feel good about advocating.

For further assistance in manipulating these data, you may contact the American Federation of Teachers at 555 New Jersey Avenue, NW, Washington, DC 20001. Email highered@aft.org or telephone 800/238-1133 x4426.

APPENDIX A

National Databases

AFT Higher Education Data Center

American Federation of Teachers

<http://highereddata.aft.org>

The AFT Higher Education division maintains an extensive database that contains information on all U.S. institutions of higher education. The data are compiled using data from the U.S. Department of Education's IPEDS data collection program (see description below). While the data included here are the same data available at the IPEDS site, users may find AFT's Data Center more accessible.

Information Available: The AFT Higher Education Data Center is a source for data on average salaries for full-time and part-time faculty members as well as the number of faculty members for each faculty type.

U.S. Department of Education

National Center for Education Statistics

Integrated Postsecondary Education Data System (IPEDS)

<http://nces.ed.gov/ipeds>

The Integrated Postsecondary Education Data System (IPEDS) is the core postsecondary education data collection program for the National Center for Education Statistics (U.S. Department of Education). IPEDS surveys most postsecondary institutions annually, gathering information from universities and colleges in the United States. It provides institutional-level information on issues ranging from academic staffing and finances to student enrollment and persistence. Basic salary information for full-time tenured and tenure-track faculty members for an institution may be found in the IPEDS database. IPEDS does not collect average salary for full-time nontenure-track faculty members, or average pay per class for part-time faculty members.

Information Available: The IPEDS database provides information on full-time faculty members' salaries and the overall number of faculty members. The number of full-time faculty members may be broken down into tenure versus nontenure-track faculty members, while the database can also show the number of part-time faculty members.

U.S. Department of Education

National Center for Education Statistics

National Study of Postsecondary Faculty (NSOPF)

<http://nces.ed.gov/surveys/nsopf>

The National Study of Postsecondary Faculty (NSOPF) collects data on faculty and instructional staff in American colleges and universities. It includes a nationally representative sample of full- and part-time faculty and instructional staff at public and private not-for-profit two- and four-year institutions in the United States. It provides data

on faculty backgrounds, responsibilities, workloads, salaries, benefits and institutional policies. If you are missing institutional data, NSOPF may be used to find the national average number of classes/courses taught by each segment of the instructional workforce.

Information Available: The NSOPF database reports on the average number of classes taught by full-time and part-time faculty members.

U.S. Department of Education
National Center for Education Statistics
National Postsecondary Student Aid Study (NPSAS)
<http://nces.ed.gov/surveys/npsas>

The National Postsecondary Student Aid Study (NPSAS), conducted by the U.S. Department of Education, includes nationally representative samples of students from all backgrounds and types of postsecondary institutions. NPSAS collects data on student expenses, tuition, financial aid and academic and demographic characteristics. It may serve as a source of information for graduate-level teaching and research assistantships and pay for graduate employees.

Information Available: NPSAS provides national averages for salary and number of graduate teaching and research assistants and graduate employees.

APPENDIX B

Methodology

The approach to this research study includes two levels of analysis—national and institutional. No one source of data provides all of the information needed. As a result, the analysis uses several data sources to estimate the number of classes taught by part-time and contingent faculty in three types of public institutions and by academic department within those institutions.

The U.S. Department of Education's 2004 National Study of Postsecondary Faculty (NSOPF) provided the data necessary to make national estimates of how many undergraduate sections are taught by part-time and full-time faculty members. This survey includes data by type of institution (community college, comprehensive four-year and research university), geographic region of the country and type of community (urban, rural, or suburban). The analysis provides information on the number of sections taught within each academic department, by faculty with different tenure and employment status, and by the salary paid per section for each faculty type.

The faculty types include full-time or part-time, and tenured, tenure-track or nontenure-track. The survey excludes visiting professors, faculty funded by grants and any other uncategorized faculty positions.

The NSOPF data have some limitations. First, the survey was done in 2003-04, so it was necessary to adjust the salaries paid to faculty to approximate current salaries more closely. Second, the database is a national sample that allows generalizations about classes of institutions, but not individual states or institutions. Third, NSOPF does not record the number of graduate employees who may serve as the primary instructors for many courses. Other sources of data have been used to describe graduate employees and their role as teachers.

The U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) allows us to report institutional data for full-time faculty on a national level. National full-time faculty salary averages from 2006-07, by academic rank and institutional type, provide current salaries, which have been used to increase the NSOPF-derived salaries to better represent contemporary levels. The results are limited by the fact that IPEDS only includes information on full-time faculty salaries. The calculation of salaries does not include additional institutional income, such as earnings for summer sessions, overload courses, research and administrative work. The Consumer Price Index (CPI) was used to adjust the salaries of part-time faculty members in NSOPF for inflation; these adjusted salaries were used to modify the estimates in the test states.

To compensate for the inability of NSOPF data to provide state-specific estimates, information was collected directly from colleges in five states. This provided the information needed to update the national estimates and reflect conditions in each state. The states included—New Jersey, Oregon, Pennsylvania, Washington and Wisconsin—represent a variety of regional and demographic conditions.

At least five public institutions were contacted in each of the five states. At least one institution was included from the following categories: a large or small two-year community college, a large or small four-year comprehensive college and a state research university. Representatives from the human resources department, the provost's office and, when applicable, the institutional research department were contacted. As an alternative, each state's higher education commission, state coordinating board or relevant state-level assessment office was asked for the data. In some instances where the information was not forthcoming, we contacted representatives from the college faculty's collective bargaining agent.

In each case, the goal was to record average pay for faculty members in each employment category and to determine how many sections and students they taught. This was done for each academic department. This is not a statistically reliable sample; however, in conjunction with the NSOPF data, it does provide a reasonable indication as to how much institutions in the state vary from national averages.

Some limitations to this portion of the research do exist. First, we encountered the problem of comparability. Each institution, whether within the same state or in different states, collects its own unique institutional data. Some data points were not comparable across institutions because common definitions were not used. Second, non-response resulted because the requested data were not readily available or the institution did not have the time and/or resources needed to collect such data. Third, some institutions did not have or did not intend to collect the data needed for this study. In these cases, we modified the data to fit into comparable categories and/or replaced the targeted institution with a similar institution in the same state.

The estimates for graduate teaching assistants were much more difficult to determine because there are no national surveys that allow us to identify graduate employees who are the teachers of record. Our estimates represent an early attempt to develop some numbers that provide a starting point for making an estimate. We were able to obtain useful information from three public universities on graduate employees as the teachers of record. The information includes the number of classes they taught and the pay per section taught. The heads of AFT graduate student union groups provided these estimates, so they may not represent the national picture.

For all of its limitations, this report represents the first published estimate of the nature and extent of graduate students' teaching responsibilities at our nation's universities and makes clear the need for more extensive investigation of an important part of the university workforce.

The techniques provide an estimate of the magnitude of the issue, but suggest the continuing need to produce national and state data to monitor these important trends to shape policies that are appropriate to the changing landscape of postsecondary education.

END NOTES

¹ It is important to note that these calculations do not take into account the number of classes taught by graduate employees.

² James, Donna Walker, Sonia Jurich, and Steve Estes, *Raising Minority Academic Achievement: A compendium of education programs and practices*. Washington, DC: American Youth Policy Forum, 2001.

³ U.S. Department of Education, National Center for Education Statistics, 2003-04 National Postsecondary Student Aid Study (NPSAS:04).

⁴ Division of Management Information PN2007/101, University of Illinois: Fall 2006; Campus Information Services, Rutgers, the State University of New Jersey: Fall 2006.

⁵ Office of Institutional Research [JPM], University of Oregon: 2006-2007 Academic Year.



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